



## Consumer Confidence Report (CCR)

この情報は重要です。  
翻訳を依頼してください。

### 2009 Water Quality Report Okuma Recreational Area, Okinawa, Japan

#### Introduction

This is an annual report on the quality of tap water delivered to Okuma Recreational Area. This report's sole purpose is to increase consumer knowledge of drinking water quality, sources, susceptibility, treatment, and drinking water supply management. It also increases awareness of consumers to potential health risks, so they may make informed decisions to reduce those risks, including taking steps toward protecting their water supply.

#### What is a Consumer Confidence Report?

In 1996, Congress amended the Safe Drinking Water Act. It added a provision requiring that all community water systems deliver to their customers a brief annual water quality report. The Japan Environmental Governing Standard (JEGS) does not have a requirement for generation of a CCR. However, Air Force Instruction 48-144, *Safe Drinking Water Surveillance Program*, provides guidance for overseas installations in preparing a water quality report that may be modeled after a CCR.

#### Is my water safe?

Absolutely! No one is concerned more about the potability of your water than Okuma Services and Bioenvironmental Engineering personnel. Last year, we conducted tests for over 100 contaminants. Of these 100 contaminants, we only detected 10 contaminants and found only 1 at a level higher than the JEGS Maximum Contaminant Level (MCL). As we told you at the time, the water temporarily exceeded drinking water standards. The water system violated an action level for lead. Infants and children who drink water containing lead in excess of the action level could experience delays in their physical or mental development. Children could show slight deficits in attention span and learning abilities. Adults who drink this water over many years could develop kidney problems or high blood pressure. The 18 MDG collected additional samples to ensure water quality and safety. The water system is currently tested for lead every six months. As a consumer you are encouraged to flush your line 15-30 seconds from the tap before using it for drinking or cooking any time the water in a faucet has gone unused for more than six hours.

#### Do I need to take special precautions?

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from contaminants. These people should seek advice about drinking water from their health care providers. EPA/Centers for Disease Control (CDC) guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants are available from the Safe Water Drinking Water Hotline (800-426-4791).

#### Why are there contaminants in my drinking water?

Drinking water, including bottled water, may reasonably be expected to contain small amounts of some contaminants. The presence of

contaminants does not necessarily indicate that water poses a health risk. As water travels over the surface of the land or through the ground, it dissolves naturally occurring minerals and, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or from human activity. Microbial contaminants, such as viruses and bacteria, may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife. Inorganic contaminants, such as salts and metals, can be naturally-occurring or result from urban stormwater runoff, industrial, or domestic wastewater discharges, oil and gas production, mining, or farming. Pesticides and herbicides may come from a variety of sources such as agriculture, urban stormwater runoff, and residential uses. Organic chemical contaminants, including synthetic and volatile organic chemicals, are by-products of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff, and septic systems. Radioactive contaminants can be naturally occurring or be the result of oil and gas production and mining activities. In order to ensure that tap water is safe to drink, EPA prescribes regulations that limit the amount of certain contaminants in water provided by public water systems. Food and Drug Administration (FDA) regulations establish limits for contaminants in bottled water, which must provide the same protection for public health. In Japan, the Government of Japan and the US Forces, Japan, also regulate the quality of drinking water.

#### Okuma Water System Information

The Okuma drinking water is being delivered from the Hiji River. The water is pumped into the water treatment plant and gravity-fed into the water distribution system. This treatment plant is operated by the 18<sup>th</sup> Civil Engineer Squadron and treats the water prior to servicing the Okuma distribution system.

#### Monitoring of Your Drinking Water

We use only EPA-approved laboratory methods to analyze your drinking water. Our trained personnel take water samples from the distribution system and residents' taps. Samples are then shipped to an accredited laboratory where a full spectrum of water quality analyses is performed. The 18th Aerospace Medicine Squadron, Bioenvironmental Engineering Flight, collected 250 samples in 2009, which were analyzed for roughly 100 different contaminants. Of these 100 contaminants, only 10 were detected. Out of the 10 chemicals detected, only one chemical was detected at levels higher than the Maximum Contaminant Level (MCL). Results for these 10 chemicals are located on the next page.

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## 2009 Water Quality Table

Inorganic Contaminants	Unit of Measurement	MCL	Highest Level Detected	Violation	Possible sources of contamination
Sodium	mg/L	200	.014	No	Seawater from storm spray, underground intrusion or relic salt-water pockets
Lead	mg/L	AL = 0.015	0.0296	Yes	Corrosion from household plumbing systems
2 out of 10 samples was found to have lead levels in excess of the Action Level of 0.015 mg/L. The JEGS states 90% of samples must be below the action level.					
Copper	mg/L	AL = 1.3	0.22	No	Erosion of natural deposits
Zero out of 10 samples was found to have copper levels in excess of the Action Level of 1.3 mg/L. The JEGS states 90% of samples must be below the action level.					
Total Nitrate/Nitrites	mg/L	10	0.24	No	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits.
Microbiological Contaminants	Unit of Measurement	MCL	Highest Level Detected	Violation	Possible sources of contamination
Total Coliform	# of Positives / month	> 1 positive	0	No	Naturally present in the environment
Disinfection Byproducts	Unit of Measurement	MCL	Highest Level Detected	Violation	Possible sources of contamination
Total Organic Carbon	mg/L	2.0	.905	No	Decaying natural organic matter
Alkalinity	Mg/L	NA	80	No	Dissolution of carbonate rocks; presence of carbon dioxide in atmosphere
Residual Disinfectants	Unit of Measurement	MCL	Highest Level Detected	Violation	Possible sources of contamination
Free Chlorine	PPM	NA	2.0	No	Water additive used to control microbes
Volatile Organic Chemicals	Unit of Measurement	MCL	Highest Level Detected	Violation	Possible sources of contamination
Total Trihalomethanes	mg/L	0.08	.025	No	By-product of drinking water chlorination
Haloacetic Acides	Mg/L	0.06	.002	No	By-product of drinking water chlorination

### *Abbreviations Used:*

**NA:** not applicable

**mg/L:** milligrams per liter

**µg/L:** micrograms per liter

**ppm:** parts per million

**MFL:** millions of fibers per liter

**pCi/L:** picrocuries per liter

**CY:** Calendar Year

### *Definitions Used:*

**MCL:** Maximum Contaminant Level: The highest level of a contaminant that is allowed in drinking water.

**AL – Action Level:** The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

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## Frequently Asked Questions

### Why does the water sometimes look rusty?

Rusty or reddish tinted water may occur because of a sudden change in pressure due to improper flushing of a fire hydrant, etc. Iron causes the discoloration; it is not a health risk. The normal flow of water will usually clear the mains within two hours or less. Check your water by flushing a commode bowl three times every 15 to 20 minutes. If you live on or near the end of a long, main distribution line, additional flushing may be required. Galvanized iron pipes or fittings within a home or building may also cause discolored water. Running the water will clear the piping system. If the hot water is rusty, the water heater may need to be flushed.



### What is a Precautionary Boil Advisory?

If a problem is detected in the system, such as a drop in pressure, a water main break, or a routine positive coliform sample, Bioenvironmental Engineering puts out a Precautionary Boil Advisory and immediate testing requirements go into effect. Boil Advisories are precautionary and do NOT necessarily mean that contamination has been detected. The notice will describe any precautions you need to take such as boiling your water to kill any potential bacteria. Retesting continues until the system can reliably demonstrate that it is free of problems.

### Is it okay to drink from a garden hose?

The water is safe but a garden hose is treated with special chemicals that make it flexible. Those chemicals are not good for you and neither are the bacteria that may be growing inside the hose.

### Will using a home water filter make the water safer or healthier?

Most filters improve the taste, smell and appearance of water, but they don't necessarily make the water safer or healthier. Please keep in mind that filters require regular maintenance and replacement, if ignored, water quality problems may occur.

### How will I know if my water isn't safe to drink?

Your water supplier must notify you by newspaper, mail, radio, TV, or a hand-delivered notice if your water doesn't meet standards or if there is a waterborne disease emergency. The notice will describe any precautions you need to take, such as boiling your water.

### Doesn't the water system have a lead problem?

In 2009, 2 out of 10 samples were found to have lead levels in excess of the Action Level of 0.015 mg/L. The Japan Environmental Governing Standards (JEGS) states 90% of samples must be below the action level. The water system will be monitored every six-months until two consecutive sampling periods are under the established Action Level.

### What can I do to minimize my exposure to water with higher levels of lead?

Run your cold water flushing the system for 15-30 seconds or until you notice a temperature change. Boiling water will not remove lead. As part of recommended pipe flushing and to minimize wasted water, you can bathe, use the bathroom, run your dishwasher and/or washing machine before using water for drinking. This will reduce standing water levels and therefore the lead levels. Use only cold water or bottled water for cooking and drinking. Heated water tends to concentrate more lead. Periodically, remove and clean the strainer/aerator device on your faucet to remove debris.

### I don't like the taste/smell/appearance of my tap water? What's wrong with it?

Even when water meets standards, you may still object to its taste, smell, or appearance. Taste, smell and appearance are also known as aesthetic characteristics and do not pose health effects. Common complaints about water aesthetics include: temporary cloudiness (typically caused by air bubbles) or chlorine taste (which can be improved by letting the water stand exposed to the air).

### What is backflow and how can I prevent it?

It's just what it sounds like: the water is flowing in the opposite direction from its normal flow. With the direction of the flow reversed, due to a change in pressure, backflow can allow contaminants to be pulled into the drinking water. The following tips may help to reduce the potential for backflow:

- Don't submerge hoses in buckets, pools, tubs, or sinks.
- Don't attach chemical sprayers to your garden hose without first installing a backflow prevention device such as a vacuum breaker on the spigot. This is an inexpensive device that can be purchased at any plumbing or hardware store and installation is as easy as attaching your garden hose to a spigot. The chemicals used on your lawn can be fatal if ingested.